STATE OF MARYLAND

DHMH

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Office of Preparedness & Response
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January 6, 2009
Public Health & Emergency Preparedness Bulletin: # 2008:53
Reporting for the week ending 01/03/09 (MMWR Week #53)

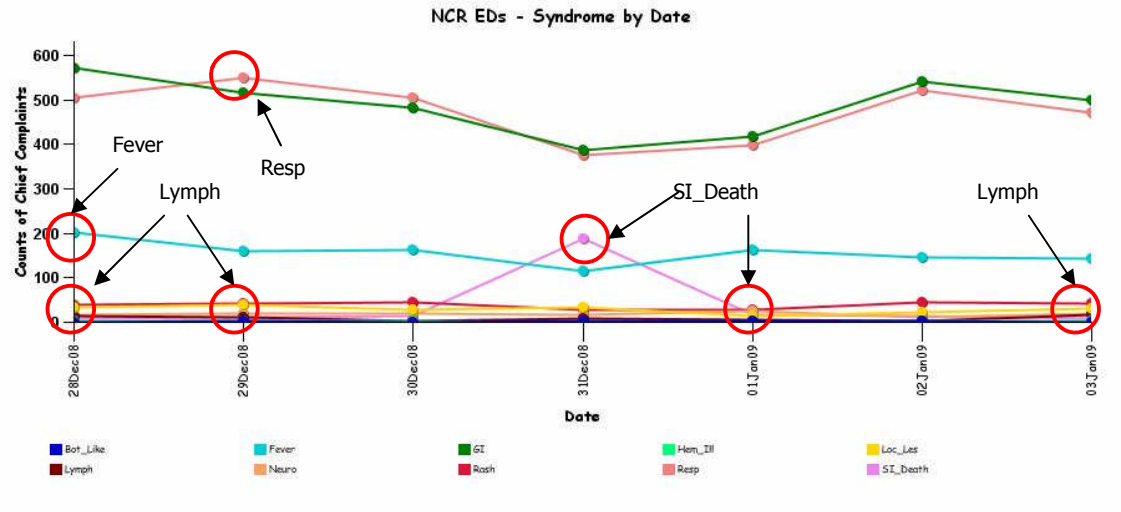
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

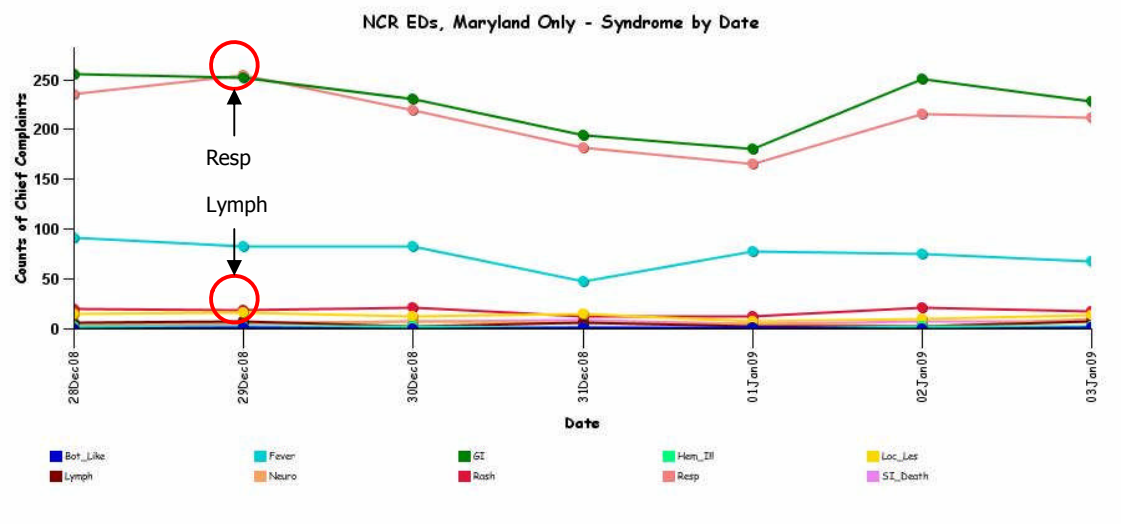
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

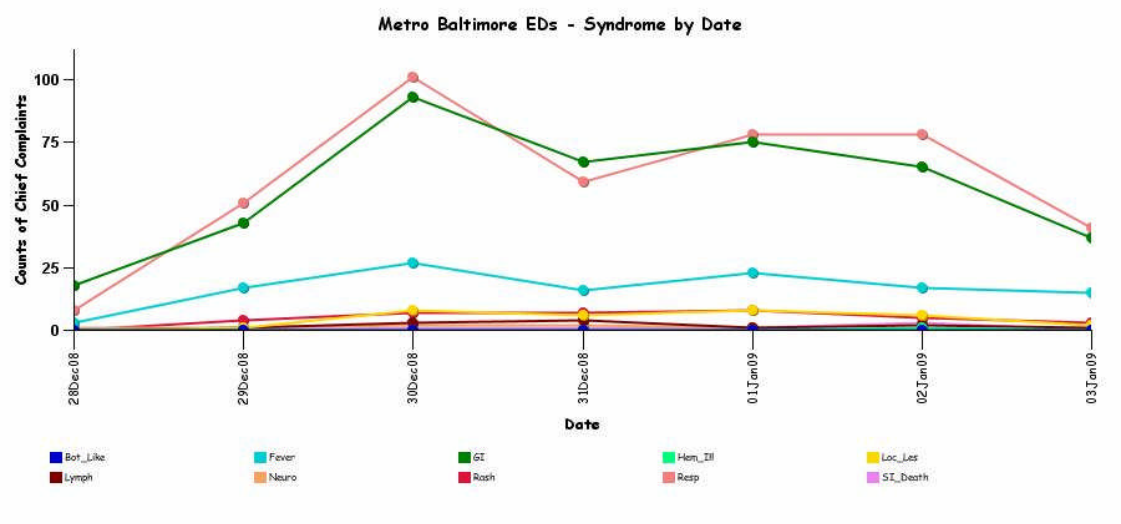
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.



* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.

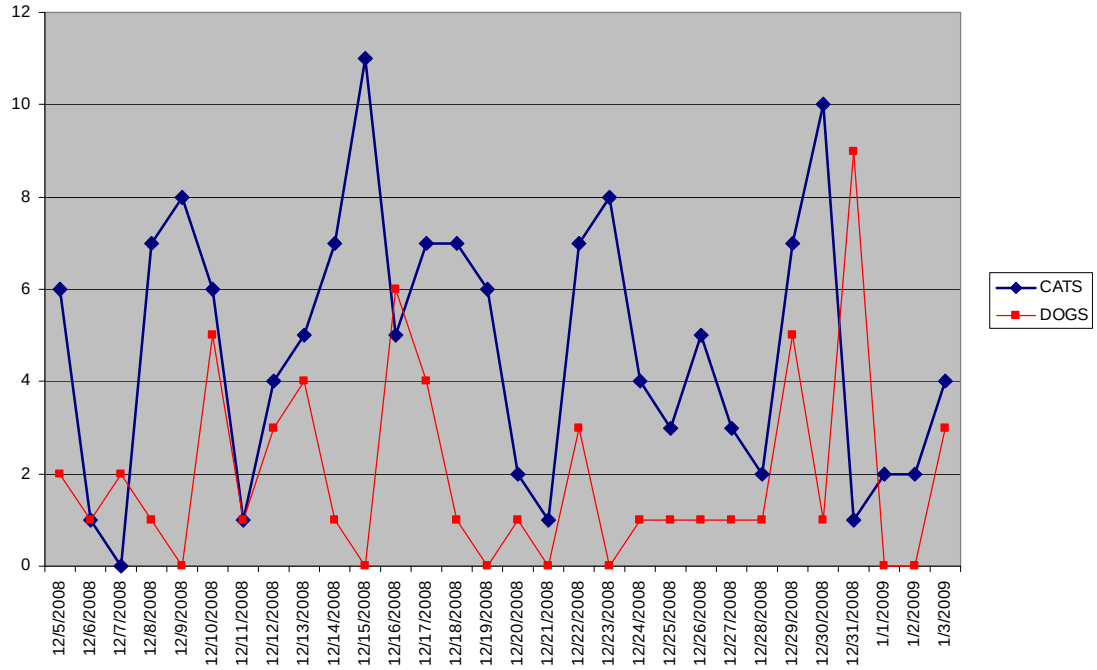


* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

****NOTE: Not all data for Metro Baltimore hospitals was available for December 28, 2008 due to technical issues****

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

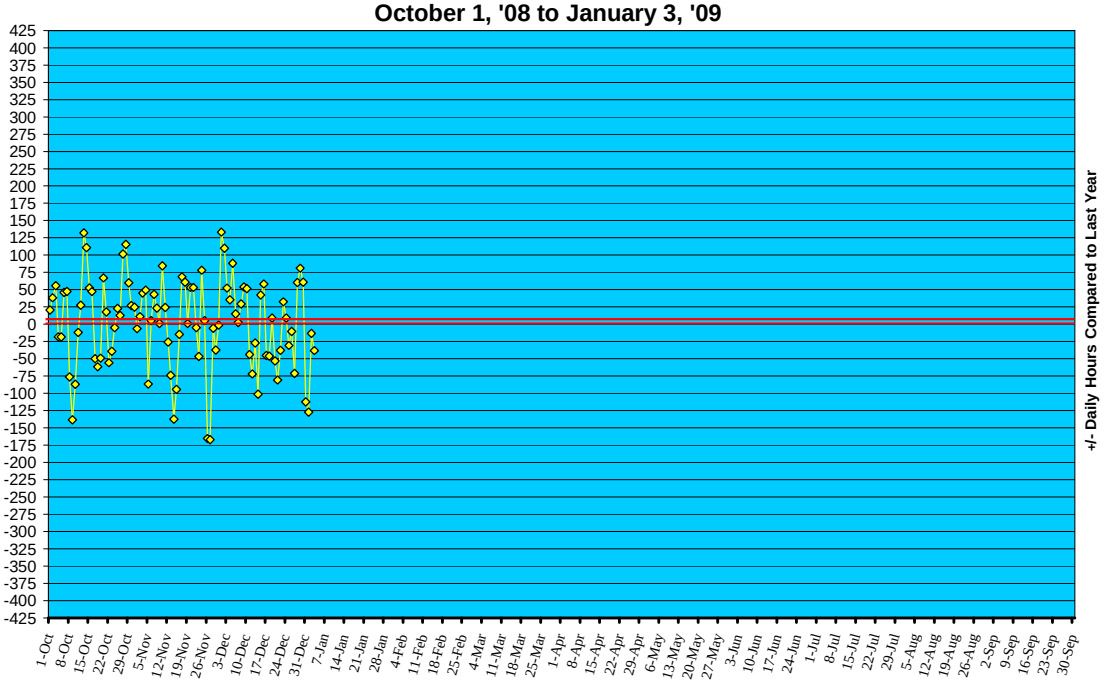
Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08.

Statewide Yellow Alert Comparison
Daily Historical Deviations
October 1, '08 to January 3, '09



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in November 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (Dec 28, 2008 to Jan 3, 2009):	08	0
Prior week (Dec 21 – 27, 2008):	06	0

11 outbreaks were reported to DHMH during MMWR Week 53 (Dec. 28, 2008- Jan. 3, 2009):

8 Gastroenteritis outbreaks
4 outbreaks of GASTROENTERITIS associated with Nursing Homes

3 outbreaks of GASTROENTERITIS associated with Assisted Living Facilities

1 outbreak of GASTROENTERITIS associated with a Hospital

3 Respiratory illness outbreaks
2 outbreaks of PNEUMONIA associated with Nursing Homes

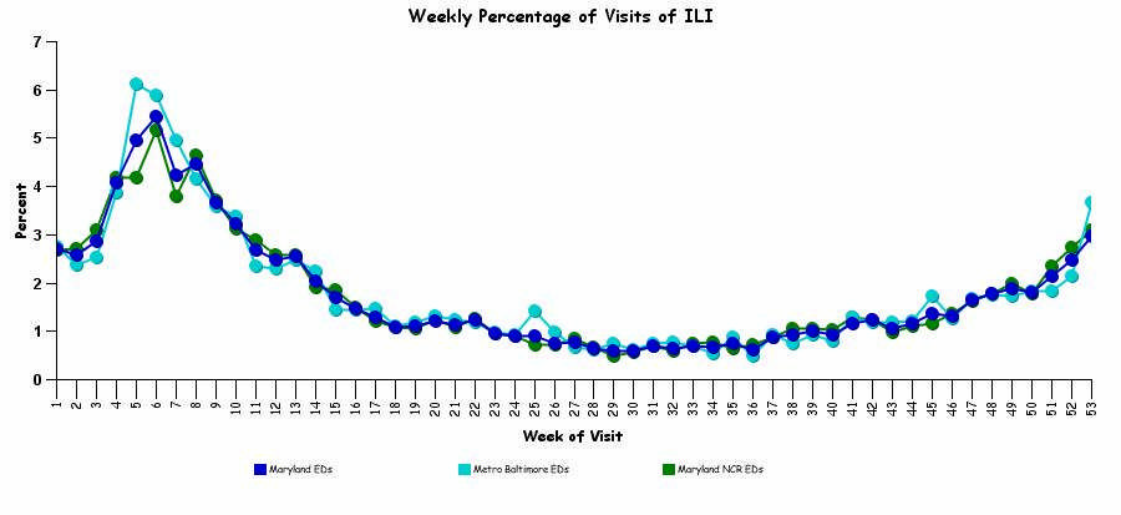
1 outbreak of ILI/PNEUMONIA associated with a Nursing Home

MARYLAND SEASONAL FLU STATUS:

Influenza activity in Maryland for Week 53 is REGIONAL. During week 53, 17 confirmed cases of influenza were reported to DHMH.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of December 16, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 391, of which 247 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA (INDIA): 31 Dec 2008. The Assam government has made it clear that avian influenza has spread to new areas of the state. Sources in the Animal Husbandry and Veterinary Department said that the deadly bird flu virus was confirmed in about 15 more villages. The health authorities have been asked to cull nearly 70 000 birds in these areas. Speaking on this situation, a veterinary department official said: "So far, about 150 villages in 8 Assam districts were hit by bird flu, and Rapid Response Teams have already slaughtered about 510 000 chickens and ducks since 27 Nov 2008." The latest report added that culling was in progress in the new areas, including Manahkuchi of Hajo, Chayani Barduar block in Kamrup (Rural), Tihu-Barama of Baksa, Chachaligaon Burachowk in Nagaon, Rangamati and Aurpakmoniari Tiniali in Kamrup (Metro). "We have so far identified 19 epicenters affected by bird flu in Assam. Culling operations in newly affected areas have already begun, while in some places, the drive is almost complete," added the official. The official said the source of the deadly virus was difficult to ascertain as it was air-borne. The Assam government has already banned sale and movement of poultry products from bird flu affected areas. It may be recalled that the deadly bird flu was 1st detected in Kamrup (Rural) district on 27 Nov 2008. Since then, more than 500 000 poultry have been culled by state authorities. Furthermore, the Union government has also established the outbreak of the disease among the poultry of Doloigaon Uzanpara village under Dhaligaon Development Block of Bongaigaon District.

AVIAN INFLUENZA, HUMAN, H9N2 (CHINA): 30 Dec 2008. A 2-month-old Hong Kong-born infant who lives in China has contracted a mild strain of bird flu, a health official said Tuesday [30 Dec 2008]. The baby girl, who contracted the H9 strain of avian influenza, is currently isolated at a local [Hong Kong] hospital and is in stable condition, Thomas Tsang, controller of Hong Kong's Center for Health Protection, told a news conference. The baby lives with her family in the southern Chinese city of Shenzhen but recently visited a hospital in Hong Kong after showing symptoms, Tsang said. He said health officials in the southern Chinese Guangdong province are trying to determine how she caught the virus. Tsang said Hong Kong has recorded 4 previous human cases of H9 infections. All patients have fully recovered. The case came weeks after 3 dead chickens tested positive for bird flu in Hong Kong, prompting the city to suspend poultry imports for 21 days and begin slaughtering 80 000 birds [see ProMED ref. (117) below. - Mod.JW] Hong Kong's biggest bird flu outbreak was in 1997, when the more virulent H5N1 strain jumped to humans and killed 6 people. Bird flu has killed at least 247 people worldwide since 2003, according to the World Health Organization.

AVIAN INFLUENZA (VIET NAM): 28 Dec 2008. Bird flu has resurfaced in poultry in northern Viet Nam after many months without any cases, killing ducks and chickens at 2 farms, a state-run newspaper reported on Sunday [28 Dec 2008]. Animal health officials confirmed on Saturday [27 Dec 2008] the H5N1 virus had killed several birds among a flock of more than 100 ducks in Thai Nguyen city, 80 km (50 miles) north of Hanoi, the Ho Chi Minh City Communist Youth League-run Tuoi Tre newspaper said. Officials had also detected the virus in dead chickens at a farm in the same city, and nearly 4200 chickens had been slaughtered to prevent the virus from spreading, the report said without giving a time frame. Deputy Health Minister Trinh Quan Huan said this week that there was a very high risk of bird flu returning during the winter and spring [2008-2009] in northern Viet Nam. The H5N1 strain seems to thrive best in low temperatures. Five Vietnamese have died of bird flu so far this year [2008] out of 6 reported H5N1 infections, and all were found in northern Viet Nam during the 1st quarter of the year. The H5N1 strain has killed 247 people globally among the 391 confirmed cases of infection since 2003, according to the World Health Organization. Viet Nam has 106 infections, the 2nd highest number of cases among 15 countries with known human cases after Indonesia.

NATIONAL DISEASE REPORTS:

No New disease outbreaks were reported to CDC Critical Biological Agents for MWWR week 53.

INTERNATIONAL DISEASE REPORTS:

EBOLA, ZIMBABWEAN SOLDIERS (DEMOCRATIC REPUBLIC OF CONGO): 03 Jan 2009. 2 Zimbabwean soldiers have been killed by the deadly Ebola virus that has killed 11 people in western Congo, reports said. A total of 35 people have been infected in Kaluemba, Western Kasai [Kasai Occidental] province, where the epidemic began in late November [2008], the Democratic Republic of the congo [Congo DR] Health Minister August Mopipi confirmed yesterday [1 Jan 2009]. Zimbabwean soldiers who have been deployed to the Congo DR to reinforce Joseph Kabila's shaky defence lines against rebel leader, General Laurent Nkunda, have succumbed to the disease. Efforts to obtain comment from the army were futile. Our source said: "This information has been classified." The Congo DR reports say suspected cases of the highly contagious disease identified in the Congo DR had infected 2 Zimbabwean soldiers who both died within 24 hours. Last year, Ebola killed at least 187 people in the same region of Congo DR. Area villagers have recently reported diarrhea and vomiting of blood, said Olivier Chenebon of the Belgian charity Medecins Sans Frontieres (Doctors without Borders). The charity is monitoring 102 people who have been in contact with those infected "because it is possible they could contract the disease and infect others," Chenebon said. There are serious fears over Zimbabwean soldiers stationed in the Democratic Republic of the Congo who were deployed to repel a massive ground attack by General Nkunda's army. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

HEMORRHAGIC FEVER WITH RENAL SYNDROME (RUSSIA): 02 Jan 2009. The number of workers at a fur farm in the Mozhayskiy District of Udmurtia admitted to hospital with a diagnosis of hemorrhagic fever with renal syndrome (HFRS) has reached 16. Specialists predict a further increase in the number of HFRS cases. Airborne transmission of infection during the processing of fur pelts from slaughtered animals is though to be the source of the infection. [The removal of fat from] skins at the fur farm is carried out using sawdust obtained from a storehouse in a nearby forest area. According to Nailya Bogdanova, a pest control specialist in the infection control department of Rospotrebnadzor [Federal Services for Consumer Protection and Human Welfare), it is likely that forest rodents [the vector of HFRS] live in the stored sawdust. At least 100 persons are engaged in the processing of the furs of the slaughtered animals; consequently it is likely that the number of cases of HFRS will increase. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA HEMORRHAGIC FEVER (DEMOCRATIC REPUBLIC OF THE CONGO): 02 Jan 2008. The Ministry of Health of the Democratic Republic of the Congo (Congo DR) is continuing to respond to the ongoing outbreak of Ebola haemorrhagic fever in the Mweka health zone, Province of Kasai Occidental, with the support of a wide range of international partners. As of 31 Dec 2008 there has been a total of 3 laboratory-confirmed cases of Ebola haemorrhagic fever. WHO is aware of 36 additional suspected cases including 12 deaths associated with this outbreak. A further 184 contacts have been identified and are being followed up. Laboratory analysis was undertaken at the Institut National de Recherches Biomedicales (INRB) in Kinshasa, DRC, the Centre International de Recherches Medicales de Franceville (CIRMF), Gabon, and the National Institute for Communicable Diseases (NICD), South Africa. The WHO Country Office, Regional Office and Headquarters are supporting the MoH in Kinshasa, in Kananga and in the field at the location of the outbreak. WHO has deployed 5 vehicles to the field and has sent outbreak response equipment and medical supplies. The local health authorities in the affected area are working closely with social mobilization experts to develop key information messages for the local communities. The international response to the outbreak includes partners from Caritas (Belgium), the Congolese Red Cross (DRC), Medecins Sans Frontieres (Belgium), UNICEF (UN Children's Fund), the United Nations Organization Mission in the Democratic Republic of the Congo (MONUC), and the World Food Programme (WFP). (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

BRUCELLOSIS (KYRGYZSTAN): 02 Jan 2009. An epidemic of brucellosis in Kyrgyzstan has affected 2000 humans. The Red Cross and the World Health Organization (WHO) are at a loss knowing what to do as the hospitals fill up and nothing is being done to prevent the spread of the disease. The small former Soviet nation of Kyrgyzstan that gained independence in 1991 is showing in the Naryn region, a 10 percent incidence of brucellosis in the human population according to the WHO. Brucellosis in humans causes loss of weight, followed by a slow agonizing death and abortion in women. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (AUSTRALIA ex MALAYSIA): 31 Dec 2008. 2 Australian travelers who have recently returned to Brisbane from Sibu Island off the east coast of Malaysia have been diagnosed with chikungunya virus infection. Dr. Susan Vlack from Moreton Bay Public Health Unit said that the 56-year-old woman and her 53-year-old male companion fell ill within 5 days of arriving in Sibu, Johor province for a holiday. Both were exposed to mosquito bites and contracted similar symptoms of fever, joint pain and rash. The diagnosis of both cases was confirmed by a real-time TaqMan RT-PCR assay developed at the Public Health Virology Laboratory, QHFSS, Coopers Plains, Brisbane. A microsphere immunoassay also developed in the same laboratory detected specific anti-chikungunya IgM antibodies in the serum of the female patient. Viral RNA recovered from patient serum was further analyzed by RT-PCR and nucleotide sequencing. Results indicate that the partial E1 gene sequence obtained from the imported Malaysian strain was 100 percent homologous with previous Indian and Italian 2007 imported strains and contained one nucleotide difference compared to 2006 strains from Mauritius and Reunion Island. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

CDC has issued interim guidelines for the use of Oseltamivir (Tamiflu) in influenza cases. The guidelines can be found at http://www.cdc.gov/flu/professionals/antivirals/index.htm

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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